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ABSTRACT

Presented are recommendations for research and development in the field of competency based inservice training for Minnesota coordinators of special needs, those people at the local school district level who are responsible for services to handicapped and/or disadvantaged students in vocational education. Recommendations are given in the form of project proposals in eight areas: development of inservice training, retrieval of appropriate elements from the special education administrator training program already available at the University of Minnesota, validation of the competency statements used in the study involving incumbent coordinators, sorting administrative versus service competencies, recasting the competency statements into a conceptual framework that is compatible with the ideation of the special needs field, description of the functions which the local special needs program is intended to carry out, application of the coordinator competency list to those persons whom the coordinators supervise, and generation of a report of those administrative competencies within vocational education which are peculiar to the emergent field of special needs programing. Each outlined proposal includes a description of steps to follow in meeting the recommendation. Appendixes include a summary of the study conducted to investigate the nature of the job of coordinator of special needs in Minnesota and to determine the competencies perceived by incumbents to be required by the job. (SBH)

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RECOMMENDATIONS:

COMPETENCY-BASED INSERVICE TRAINING FOR COORDINATORS OF SPECIAL NEEDS IN VOCATIONAL EDUCATION

Department of Educational Administration
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St. Paul, MN 55108
May, 1976

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RECOMMENDATIONS: COMPETENCY BASED IN-SERVICE TRAINING
FOR
COORDINATORS OF SPECIAL NEEDS

Other reports[1] in this series have presented: the description of the job held by Coordinators of Special Needs in Minnesota; a list of competencies required of them, together with the method whereby the competency statements were generated; and the ratings by incumbent coordinators of the extent to which their job requires them to exercise those competencies.

The Coordinator of Special Needs in Minnesota is the person at the level of the local school district who is responsible for services to handicapped and/or disadvantaged students in vocational education. There are thirty-three such persons in Minnesota currently, and it is anticipated that there will be more. Most of them are fairly new at their job, two thirds of them having been engaged within the two years prior to the onset of this study. The coordinators have come from diverse backgrounds and none of them had had preservice training specific to the job of coordinator.

The job of Coordinator of Special Needs in Minnesota is quite diverse in organizational context. Although most of the positions are located within Area Vocational Technical Institutes, the placement within the schools structure varies. Their programs also are quite varied, both in

[1] Other reports relating to this project and similarly dated May, 1976, include: Competencies Required of Coordinators of Special Needs in Vocational Education in Minnesota as Perceived by Incumbents (Summary); Position Description: Coordinators of Special Needs in Minnesota; Competency Ratings: Coordinators of Special Needs in Minnesota.

type of program and in type and numbers of students served.

In the course of this overall study, forty-four competency statements were generated and submitted to the incumbent coordinators for rating. The individual coordinators differed in their reported need for specific competencies; however, for most competencies the proportion of coordinators who considered the competency to be essential ranged from one third to two thirds. With one exception (ability to coordinate student transportation among component districts) the competencies were rated as at least useful by almost all coordinators.

Summary: Conclusions of the Study

The study concluded that although the coordinator population is diverse, and although competency needs differ from position to position, the job is essentially a single job state-wide. The coordinator's job can be approached as a unity in terms of inservice training, but individualized and modular application of inservice training options will be required.

The list of competencies which was developed was concluded to be reasonably complete and to be a relevant list for this stage in the development of an inservice training program.

The job of Coordinator of Special Needs is emergent and not clearly defined, and it introduces a new general class of personnel to vocational education. This novelty is both one of technology and personality on the one hand, and of position within the administrative structure on the other. The Coordinators of Special Needs are unique in vocational education in being line personnel, below the school director and above the front line staff, who are not defined by a particular trade area.

The coordinator job has multi-disciplinary affinities, with roots in at least vocational education, special education, and vocational

rehabilitation. This was evident in the competency ratings and in the incumbents' backgrounds.

The study as completed to date comprises the first steps in building an inservice training program for Coordinators of Special Needs. It establishes a set of competency statements adequate for the beginning of an inservice training program.

Recommendations: To the Field

Strong recommendations to the field are not warranted solely on the basis of this study because of its limited scope. Some general suggestions are in order, however.

Clarification of Job

The performance referents of the competency statements, taken together, constitute one description of the job of Coordinator of Special Needs. The ratings given to these referents by the coordinators are measures of agreement among the coordinators and of agreement between the coordinators and some ideal of what the job ought to require.

The ratings could well form the basis for additional communication between the state educational agency and the coordinators. Some of the topics that could be addressed, perhaps jointly by the state agency representatives and the existing organization of Minnesota special needs personnel, might include the following.

Are there competencies that can be foreseen as being more important in the future than has been true in the coordinators' experiences to date? The insuring of due legal processes to students with special needs illustrates a possible competency referent of this kind. Are there competencies which, by their acquisition and exercise, will improve the quality of service to students? Are there competencies which constitute the minimum base for

acceptable program operation, and are there others with lesser priority? Which competencies may acceptably be located in supervised staff in those programs where the coordinator is responsible for several staff members?

Position Variables

The position questionnaire in this study inquired about the position context and the program supervised, as well as about the incumbents' characteristics. A wide range of variation was found.

The position topics might be examined in a manner similar to that proposed for the competency ratings.

Illustrative topics might include the following: pros and cons of alternative placements of the local position in the table of organization; budget categories that might be appropriately uniform; expectable range of program size in relation to size of administering school; and categorization, for reporting purposes, of the special needs shown by the students.

These and other position variables may be noted for attention. It is the investigators' conviction, however, that program diversity is valuable, especially during the first few years of a program or program type. Uniformity should therefore not be imposed, except in the matter of records and reports, without thought of the consequences to progress and innovation.

Incumbent Variables

The study reported here noted that wide diversity characterized the incumbent coordinators. The state Plan specifies three major kinds of minimum backgrounds for those who are certified as Coordinators of Special Needs, together with some options internal to those kinds of backgrounds. No significant instances were found in which the certification standards were not met.

It is the investigators' conviction that this diversity of background is good. It brings into the field an array of skill, orientation, disciplinary contacts, and personal capabilities that enable cross-fertilization as well as a pool for the selection of excellence. It is probably a source of vitality in this relatively new job, and experimentation is especially important during this time when no preservice training is available. Note should be taken of the study's failure to identify substantial ways in which incumbent variables were contingent with competency ratings. This failure does not allow conclusions regarding the possession and exercise of competencies, but it is suggestive that the diversity need not be repressed.

Recommendations: Research and Development

The study reported in these four project reports comprised on early segment of a larger projected research and development program. It was intended to facilitate decisions — that is, to make recommendations — about the future of that larger program.

The recommendations for research and development are presented here in the form of skeletal project proposals. The eight proposals are summarized in Figure 1.

In Figure 1 the overall proposal (Implement Research and Development Recommendations) is shown as leading to eight sub-projects. The eight sub-projects can be considered somewhat in isolation from each other, although the totality would move much more effectively if the eight proposals were implemented simultaneously.

(A ninth proposal not directly derived from the present study, but certainly arising as a collateral consideration, is presented as a project memorandum appended to this report. It calls for the establishment of a

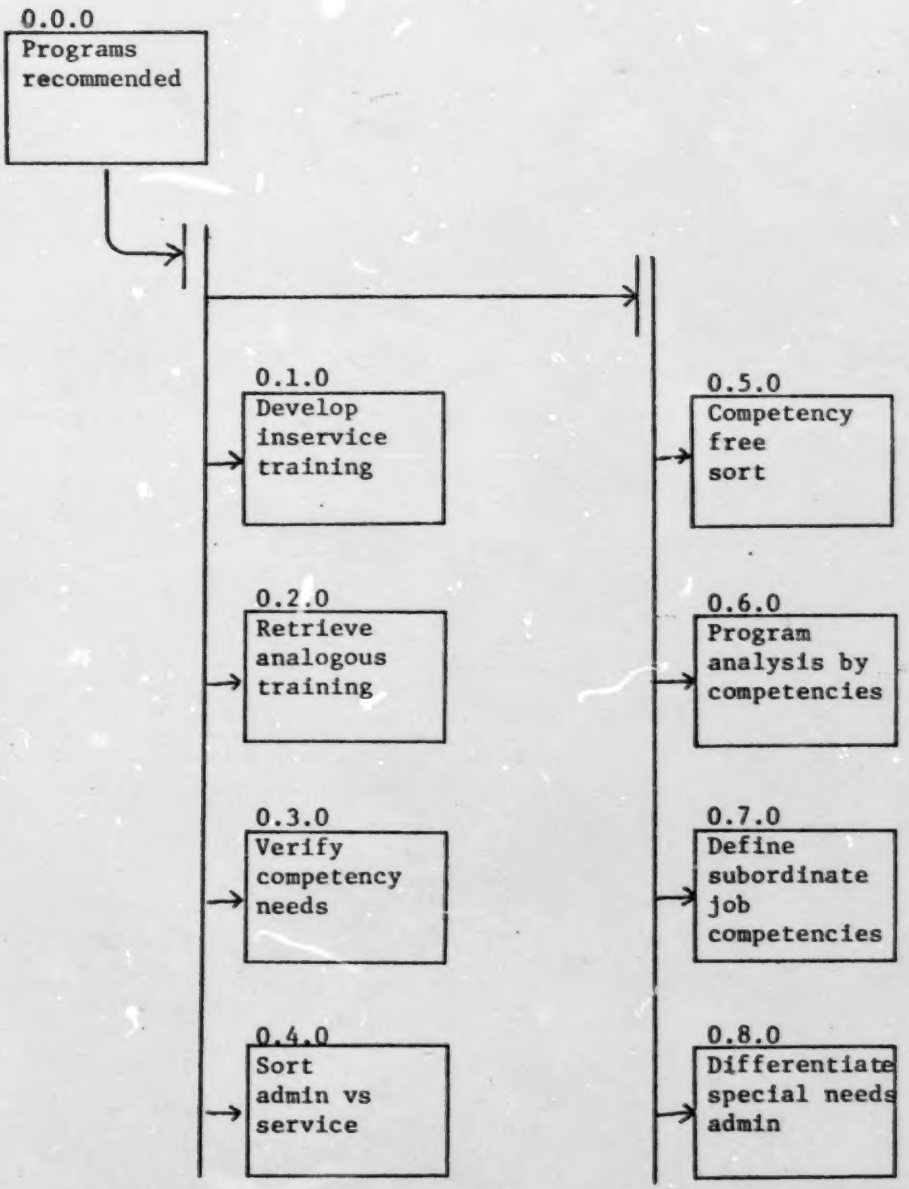


Figure 1. Proposed programs of research and development and of action derived from the planning study of competencies required of Coordinators of Special Needs.

more useful taxonomy of special needs. It is at least partly motivated by this study's finding that many local coordinators were unable to specify their students' needs. This finding, according to what is available in the national literature, is by no means a local problem. The appended proposal would allevaite some of that problem.)

The eight proposals which follow are presented in a rough order of priority.

0.1.0 Develop Inservice Training for Coordinators of Special Needs. This proposal is essentially one for continuation and implementation of the programmatic research and development of which the study reported here constituted the first phases. The first two steps of this proposal have already been completed.

1.1 Assess Competency Needs. This step includes a job description together with analysis of local and national facts. (Completed adequate to this stage of the project.)

1.2 Specify Competencies. This includes such steps as generating competency statements and securing field reports of the extent to which they are pertinent to the job. (Completed adequate to this stage of the project.)

1.3 Determine Competency Components. This is essentially a step of detailing the competencies in accordance with one of the several acceptable detailing schemes. For example, the order of priority might be established. Another detailing might include establishing the levels of competence with which the competency must be carried out. Another detailing might be the breaking of each component into technical, conceptual and human elements. Finally, and most directly a matter of detailing, each competency may be divided into its several performance objectives. A crucial factor in this, as well as other steps, is the need for maintaining both technical excellence in the process of detailing and credibility in the arena of educational politics.

1.4 Identify Attainment Procedures. This is devising the content, methods, and materials of the training program. It is subordinate to the competencies to be attained as well as to the characteristics and circumstances of the learners. In this proposal it is envisioned that instruction will be substantially field based and individualized.

1.5 Establish Assessment of Attainment. This is the process of specifying the criteria and measurement whereby the possession and attainment of competency may be measured. It is one of the most crucial steps in designing a competency based training program. The technical requirements of this step are great and call for fairly heavy investment of resources in the first cycle of training.

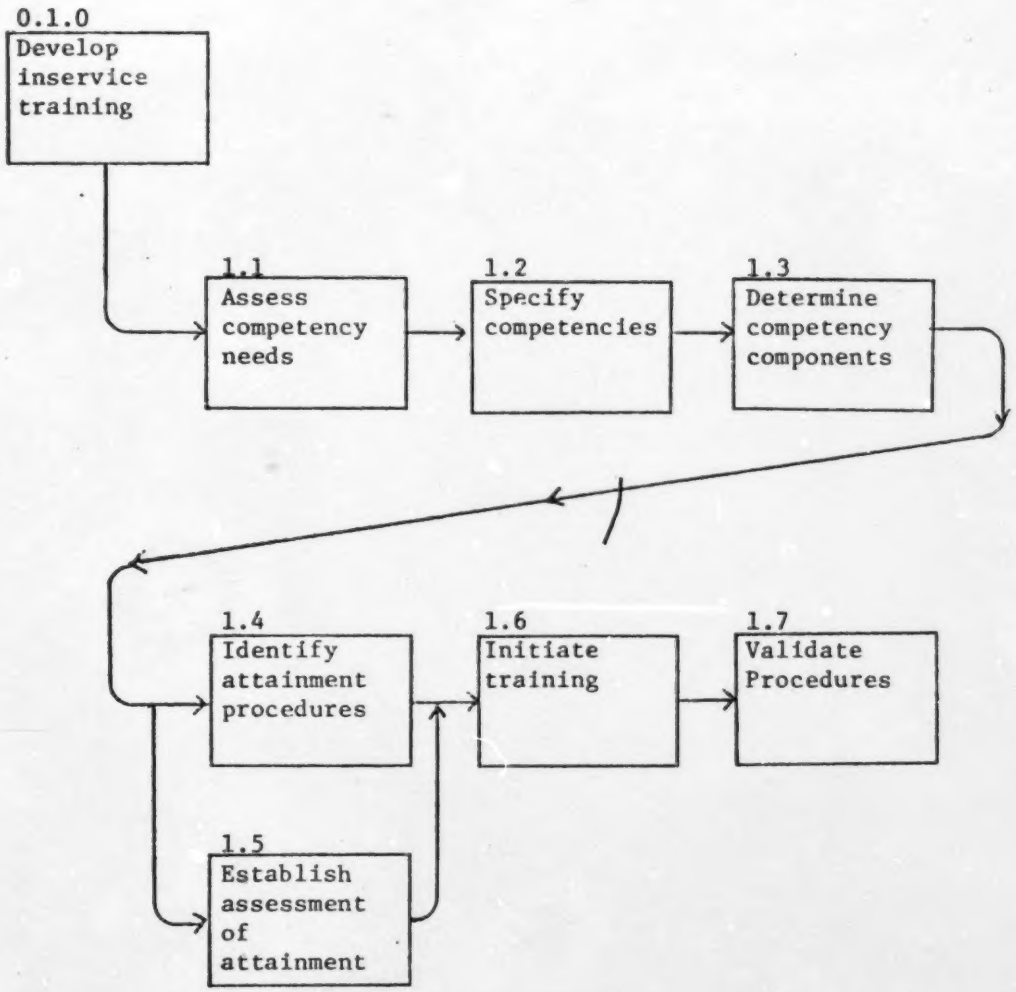


Figure 2. Proposal to develop inservice training for Coordinators of Special Needs. Completed to date through operation 1.2.

1.6 Initiate Training. This is the first round of implementing the training program. Integral steps include identification and recruitment of trainees as well as the scheduling and application of assessment and attainment procedures. Like all steps in the process, but more clearly than others, it is subject to revision as required by experience and observation.

1.7 Validate Competencies Attainment and Assessment Procedures. This is parallel to the initiation of training and constitutes the feedback through which the entire project becomes self renewing.

The foregoing is a highly generalized model and one which omits the specific interior steps as well as the specification of resources required to carry out the project. It is presented here in order to give the recommendation a certain amount of substance and clarity.

0.2.0 Retrieve analogous training. This is a proposal to accelerate the above process or to substitute for it as a distinctly second best choice. It is a proposal to retrieve appropriate training elements from the special education administrator training program (SEATP) already available at the University of Minnesota. It is presented in this form in order to avoid the impression that the SEATP modules can be profitably drawn upon in an uncritical manner. The proposal that follows is also intended to capitalize upon the project work already carried out with Coordinators of Special Needs.

2.1 Submit Competency List to Directors of Special Education. The competency list developed with Coordinators of Special Needs appears to contain many items analogous to competencies required of Directors of Education in Minnesota. This first step calls for the submission of the competency list to those directors for rating in the same form as was carried out by Coordinators of Special Needs. The purpose would be to determine which of the competencies are required of Special Education Directors. The list, as is indicated by the small off-page connector shown in Figure 3, would be retreived in the form developed in Step 1.2 of Figure 2.

2.2 Determine Overlap Competencies. A simple statistical analysis will make much of this determination. However, a small group of knowledgeable people from both types of job should be engaged to verify the overlap in fact and to determine compatability of concepts.

2.3 Select SEATP-relevant Competencies. This is a matter of converting the competency statements in the present study to the competency statements used in the SEATP scheme. (This step is advocated in order to make use of the full SEATP capability, including that of generating attainment procedures on the basis of pretests and posttests.)

2.4 Select Appropriate SEATP Modules. This step would not yet be at the individualization stage but consists of selecting those portions

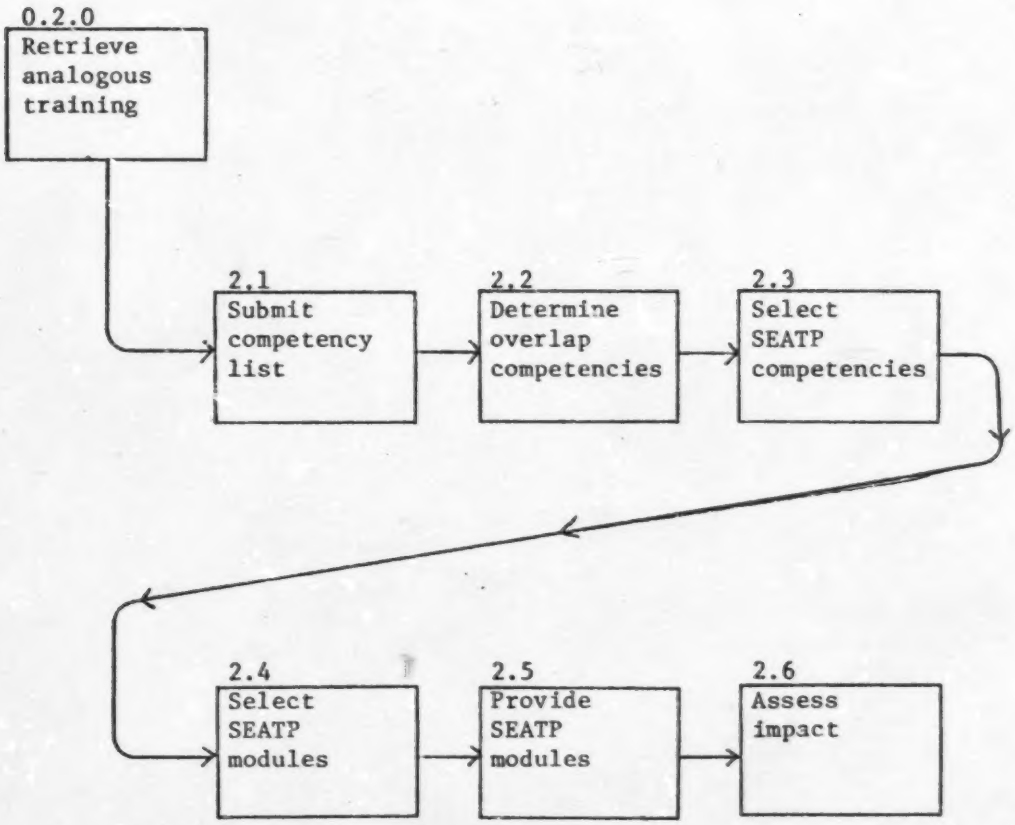


Figure 3. Proposal to retrieve analogous training from Special Education Administrator Training Program (SEATP) for use with Coordinators of Special Needs.

of SEATP which are appropriate for consideration by Coordinators of Special Needs. It is a separate step and one which can be managed internal to the SEATP to determine individual training needs.

2.5 Provide SEATP Modules to selected Coordinators of Special Needs. This is the implementation stage and it includes both attainment measurement and provision of actual training.

2.6 Assess Impact. This stage requires that an evaluation be made of the product of this proposal. An evaluation design must be set up which meets the requirements of both technical excellence and educational policy acceptability and credibility.

This proposal for retreival of analogous training should be implemented if resources cannot be found for the implementation of the first proposal. If the first proposal can be put into effect, then this retrieval would be an adjunct.

0.3.0 Verify Competency Needs. This is a proposal for the validation of the competency statements developed in the study reported here and of their ratings by the incumbent coordinators. The purpose is to establish the extent to which the ratings are truly reflective of the needs that are faced and will be faced by Special Needs Coordinators. The need for this validation is highlighted by the fact that almost a third of the incumbent competency raters had not completed a full year of work at the time they made their ratings, and may therefore not have been fully aware of all the demands of the job. In any event, a validation would be advisable in order to render credible the statements of what competencies are needed. Since all of the ratings were carried out by one class of interested party, the incumbents of the job, this proposal would bring in the perceptions of other interested groups and merge them with the existing ratings.

3.1 Identify Director Respondents. Directors of schools and comparable officials in schools other than AVTIs should be identified and solicited for participation. The purpose of identifying this group is to bring into the picture those whose view of the coordinator job is that of the person supervising the incumbent. For statistical purposes the identity of incumbent and director pairs would be preserved in code; no identified information as to the other individuals' rating should be transmitted by the project, since responses should be confidential.

3.2 Rate Competencies by Directors. The same competency statements as were presented to the Coordinators of Special Needs should be presented in the same general form to their immediate supervisors. The purpose of the rating would be to generate a supervisors-eye view of the competency needs associated with the job.

3.3 Identify Regulatory Respondents. The appropriate persons in state government who are responsible for the regulation of special

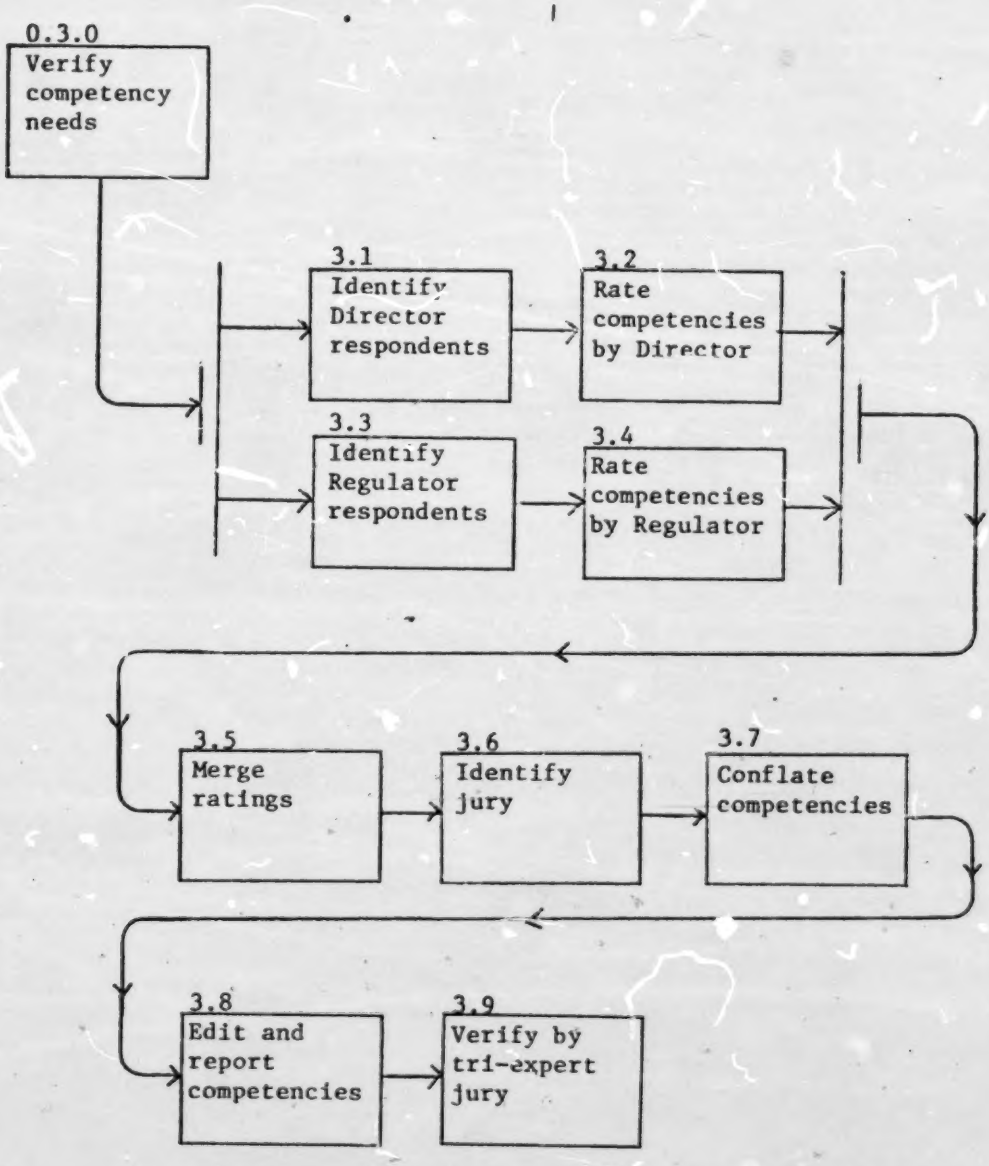


Figure 4. Proposal to verify the competency requirements perceptions of Coordinator of Special Needs.

needs in vocational education are a legitimate party to specifying the competencies required on the job. These persons would be identified to the satisfaction of the state regulatory agency.

3.4 Rate Competencies by Regulators. Again the competency statements would be rated by the regulating personnel, using the same list as was rated by the coordinators.

3.5 Merge Ratings. The ratings by the three interested parties (Coordinators, supervisors, and regulators) would be brought into a single comparative base by a descriptive analysis. The resulting report would furnish the material for the next step.

3.6 Identify Tri-expert Jury. A small jury, having acceptable technical skill and credibility to the field, should be assembled. These persons should be knowledgeable in special needs programming, educational administration, and related matters. They should be representative of and acceptable to the three major interested parties (incumbents, supervisors, and regulators).

3.7 Conflate Competencies. This step is to be carried out by the tri-expert jury on the basis of the prepared factual analysis. The major part of this task requires an assembled meeting during which concensus would be reached as to the actual competencies required on the job, drawing upon the resources of ratings. The result would be an expert and informed opinion.

3.8 Edit and Report Competencies. As a reportorial step, the opinion and consensus of the tri-expert jury would be reduced to a document draft.

3.9 Verify by Tri-expert Jury. By both disassembled and assembled means, the tri-expert jury would review the draft document and verify whether it reflected their concensus. Corrections would be made as indicated by and to the satisfaction of the jury. The result would be a validated statement of the competencies required of Coordinators of Special Needs in Minnesota.

0.4.0 Sort Administrative Versus Service Competencies. The purpose of this is to abstract from the competency list those competencies which are administrative in contrast to those which are technical and or direct service. The purpose would be to specify those competencies that are specific to the coordinator of the special needs program on the supposition that the other competencies would be shared with personnel who provide technical and direct service within that program. The latter set of competencies may well be provided by a training program geared to the needs of persons other than coordinators.

4.1 Identify Jury. The jury to be identified here would be small, perhaps on the order of three. The individuals should be conversant with educational administration and policy, and specific expertise in vocational education should be included. Expertise in the fields of special education or vocational rehabilitation would also be helpful.

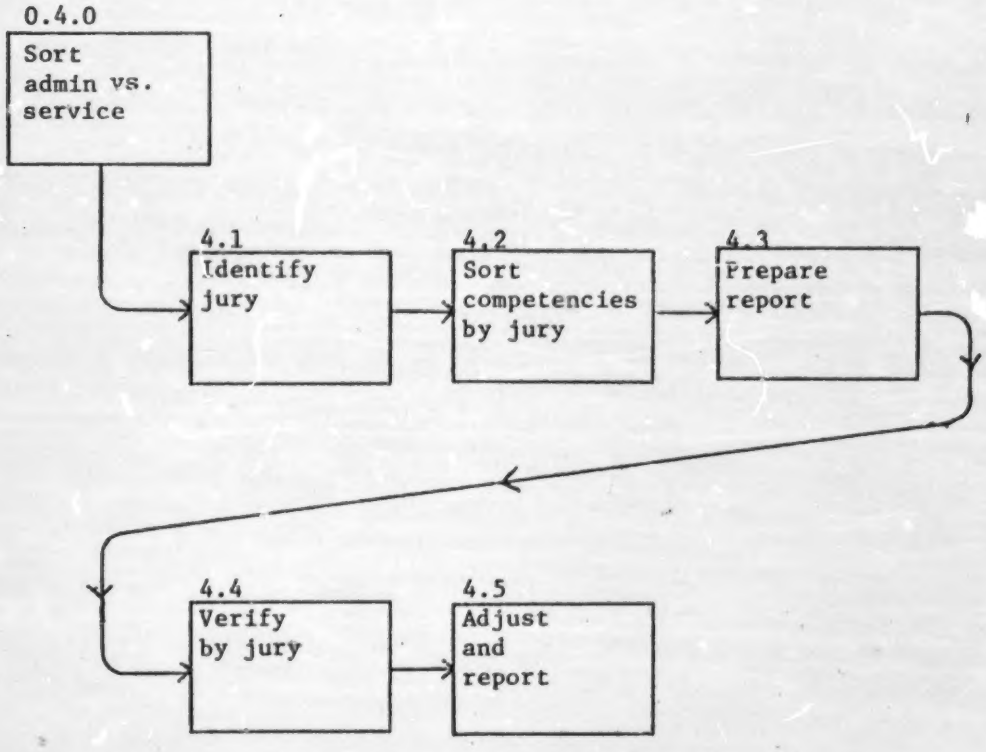


Figure 5. Proposal to identify the administrative competencies required of Coordinators of Special Needs in distinction from their service and technical competencies.

4.2 Sort Competencies by Jury. The task of the jury would be a controlled sort, with instructions to select out those competencies that are essentially or predominantly administrative in nature. This would include those competencies that are concerned with program-wide responsibility as well as other matters that involve responsibility for the oepration of other personnel.

4.3 Prepare Report. On the basis of the sort carried out in the previous step, a report would be prepared identifying the administrative competencies. A careful definition would be repeated from the instructions given for the sorting. The result would be a draft document.

4.4 Verify by Jury. The jury would be reassembled and would review the draft document. An assembled meeting is indicated.

4.5 Adjust as Required and Report. The draft document would be revised as required by jury judgment and would consist of a defensible statement of those competencies that are essentially administrative in nature and specific to the job of Coordinator of Special Needs.

0.5.0 Competency Free Sort. This is a proposal to recast the competency statements into a conceptual framework that is compatible with the ideation of the special needs field. The proposal is motivated by the fact that no nationally acceptable philosophy of vocational education special needs is available and hence the conceptual structure is not available in the literature. Further, the job of the Coordinator of Special Needs is emergent and evolving and may well have a different conceptual pattern than that of other educational administrative jobs. It may be more helpful and quite possibly compatible with the (previously unexpressed) thought patterns of those in the field to cast the competencies in categories that are specific to the field.

5.1 Identify Sources. The purpose here is to identify a rather large pool of persons whose ideation is representative of the field under discussion. All of the personnel engaged in special needs programming, including those on the front line and those who immediately supervise the coordinators, would be candidates for this pool. The mathematical requirements of the next step are such that the number of sorters must exceed the number of competencies to be sorted.

5.2 Conduct Free Sort. The purpose of this step is to allow the creation of the categories into which the competencies will be sorted as well as to assign the competencies to categories. Technical considerations of a true free sort require that this step be integrated with the one that follows.

5.3 Apply LPA. The appropriate technique for analyzing the free sort is Latent Partition Analysis (LPA). This is a statistical technique somewhat similar to factor analysis, except that it accepts categorical data and does not look for causal factors. It produces a statement of the categorization which is most consistent

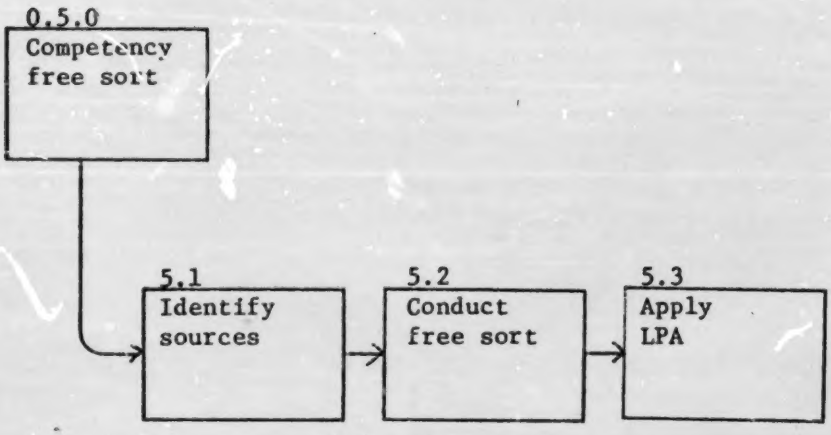


Figure 6. Proposal to categorize, de novo, the competencies required of Coordinators of Special Needs.

with the thinking of people in this field (the raters) and specifies the probability limits for each category's integrity as well as the probabilities of each element's (competency statement) membership in the category.

The free sort of competencies should enable a fresh start unbound by the traditional and analytic categories that have been built up in personnel training. The use of the most functional categories, and those most compatible with thinking in the field, should facilitate the development of relevant training.

0.6.0 Program Analysis By Competencies. The purpose of this is to describe the functions which the local special needs program is intended to carry out. The major purpose of this would be to make a description of the special needs programs, such descriptions not now being in existence. The reason for stating the purposes as performance goals is to focus upon what the program is supposed to accomplish without initially restricting the means whereby the accomplishment can be attained. If the goals are stated, then the means become a local optional matter with regard to staffing and resource allocation.

6.1 Identify Jury. The jury required here would have to be credible to the field. Its composition would helpfully be similar or identical to the jury specified in 3.6 above; representative and acceptable to the three major interested parties consisting of incumbents, supervisors, and regulators.

6.2 Select Program Relevant Competencies. The jury would review the existing list of competencies and select those that can be applied to the program. It is anticipated that with minor exceptions the existing list would probably be retained, but this decision would require the use of the jury.

6.3 Generate Additional Program Competencies. The jury in an assembled meeting, following an unassembled charge with the task, would add those program competency statements which might not be found among the existing forty-four incumbent competencies.

6.4 State in Terms of Program Goals. To the extent necessary to satisfy the jury, the competency statements would be restated in terms of the program goals appropriate to the field. At this point, the expertise of the jury would be the arbiter of whether each goal is an appropraite one for the local special needs programs.

6.5 Survey Directors for Goal Congruence. The director of each school employing a Coordinator of Special Needs should be asked to specify whether each program goal is appropriate to that local situation. Some difference of opinion should be expected. The purpose of this step is to give a field validation check on the goals generated by the jury.

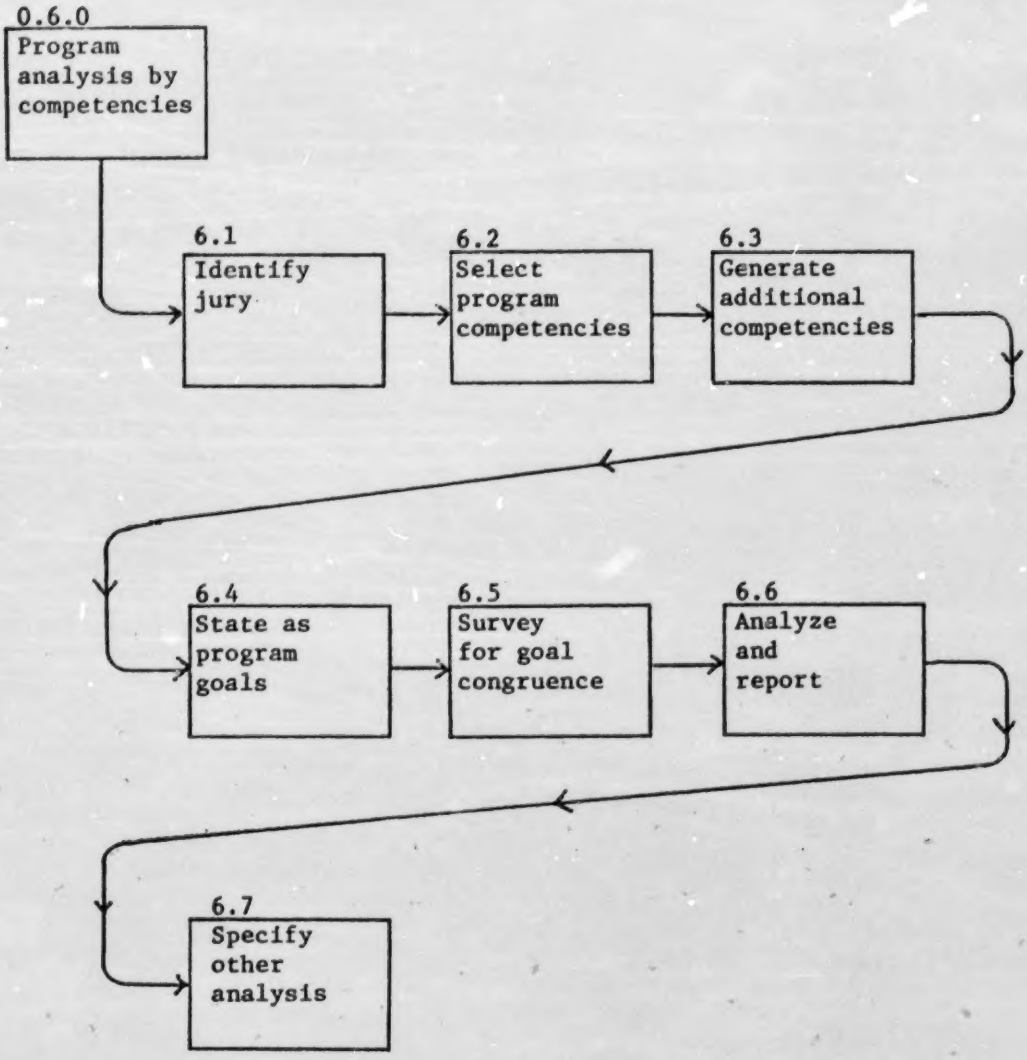


Figure 7. Proposal to analyze special needs programs in terms of goals to be attained as competency referents.

6.6 Analyze and Report. The analysis would be a statistical and descriptive one focusing upon the jury list of goals and the directors' local validating statements. The purpose of this step is to get the material into written and reported form.

6.7 Specify Other Analysis. This step is left open in the supposition that other analysis or actions would be initiated by the receivers of the report. Those receivers would include at least the incumbent Coordinators of Special Needs and their organization, the directors of the schools and their organization, and the regulating agency. An illustration of the use to which they might put this analysis would be that of a standard against which a discrepancy evaluation of programs could be carried out.

0.7.0 Define Subordinate Special Needs Job Competencies. This proposal is for the application of the coordinator competency list to those persons whom the coordinators supervise. The existing list is proposed as a starting point because the subordinate special needs personnel are probably delegated their responsibilities from among those carried by the coordinator. One of the major purposes of this proposal is to generate information upon which inservice training for all special needs personnel can be based.

7.1 Identify Total Special Needs Personnel. In the first steps of the project which generated these recommendations, a survey was made of all the personnel employed in the special needs programs and under the direction of the Coordinators of Special Needs. These people, numbering several score in Minnesota, are the subjects of this proposal. More precise identification will need to be carried out in order to specify the particular individuals for contact.

7.2 Design Differential Scoring. The scoring system used in the previous survey was appropriate to determining the incumbent coordinators' perceptions of what their job requires. For the purpose of this proposal, a different response system will have to be designed.

7.3 Administer Competencies to Personnel. The newly designed questionnaire would be administered to all of the special needs personnel in the State of Minnesota, with the respondents identified by code for personal identification and by designation as to job title and class of activity.

7.4 Analyze and Report. The analysis to be carried out would closely resemble that which was conducted for Coordinators of Special Needs in the project which has been completed and which gave rise to this recommendation. The report should be useful for the design of competency based inservice training for all classes of special needs personnel in Minnesota.

0.8.0 Differentiate Special Needs Administration. This is an information generating activity carried out to provide basis for school administration and for manpower planning. This proposal should generate a report of those administrative competencies within vocational education which are peculiar to the emergent field of special needs programming.

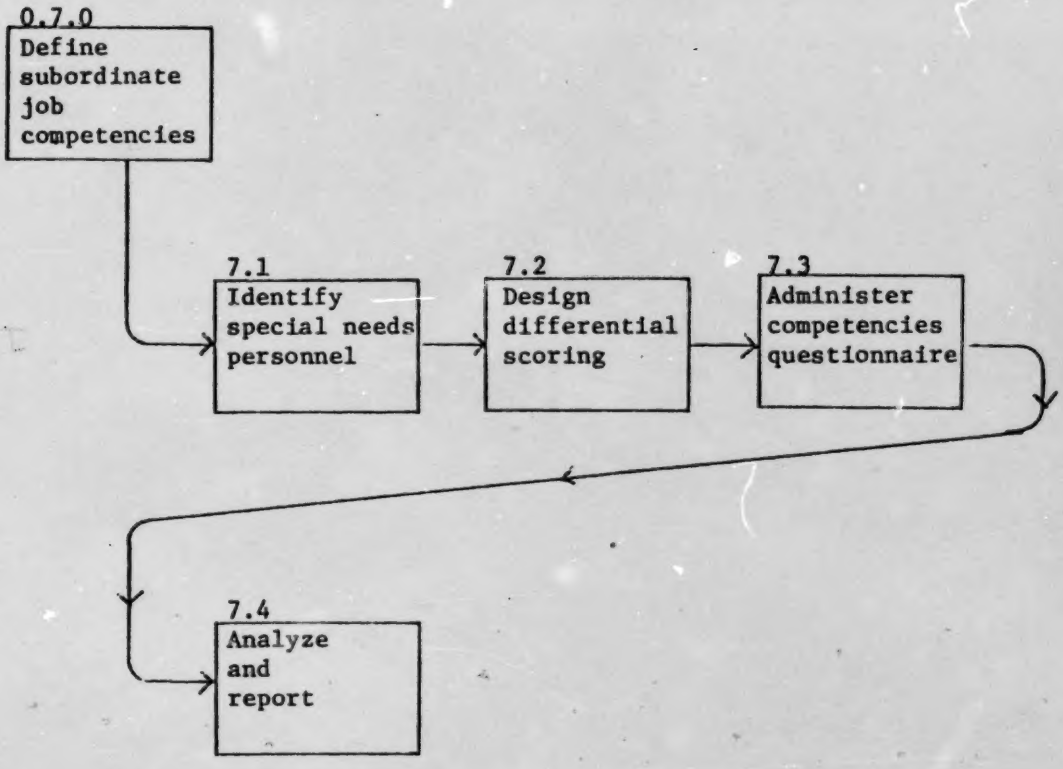
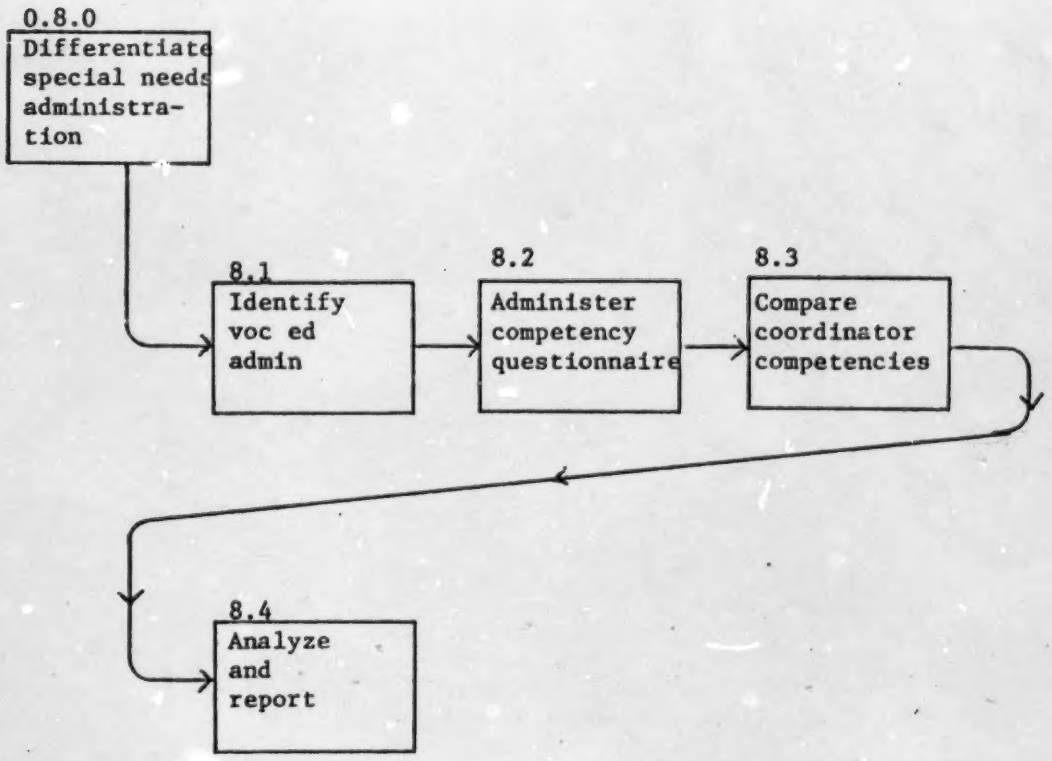


Figure 8. Proposal to specify the required competencies of special needs personnel other than program coordinator.



Note: Figure 9, but program 8

Figure 9. Proposal to differentiate the competencies required of Coordinators of Special Needs from the competencies required of other administrators in vocational education.

8.1 Identify Vocational Education Administrators. In this step all of those persons in vocational education in Minnesota who hold positions of department chairman or above should be identified. The number is expected to approximate two hundred. Both those in schools having Coordinators of Special Needs and those in vocational education not so augmented should be included.

8.2 Administer Competency Questionnaire. The original forty-four competency statements should be then submitted with as little alteration of instructions as is consistent with clear orientation.

8.3 Compare With Coordinator Competencies. A comparison should be made between the responses of these general administrators within vocational education and the Coordinators of Special Needs previously surveyed. The purpose would be to discover the extent of overlap and specialization.

8.4 Analyze and Report. The analysis should take into account both the differentiation of special needs competencies and the overlap of those competencies, the latter especially in those situations where the school has no formal Coordinator of Special Needs. Other analysis would no doubt be proposed on the basis of the other activities carried out in this series of recommendations. The report should focus upon those competencies in which the direction of a local special need program is different from that of directing the more conventional program. The intent of this focus is to help determine those ways in which the special needs programming brings in new technology and personnel requirements.

There are unquestionably a number of other proposals that could be made on the basis of the study that has been conducted. The foregoing eight proposals are deemed, however, to be the most feasible and useful.

Implementation

At the time of this writing, no resources have been allocated to carrying out any of the proposals specified here. The intent of this report is to provide a skeleton for analyzing what remains to be done and possibly for the mobilization of resources which could be applied to the tasks.

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APPENDIX A

COMPETENCIES REQUIRED OF COORDINATORS OF SPECIAL NEEDS IN VOCATIONAL EDUCATION IN MINNESOTA AS PERCEIVED BY INCUMBENTS

(Summary)

This summarizes the procedures and findings of an investigation conducted by the Department of Educational Administration, University of Minnesota, and supported in part by the U.S. Bureau of Education for the Handicapped, An Empirical Role Definition of Local Special Needs Personnel in Vocational Education.

BACKGROUND

This study was carried out as part of a programmatic research and development effort. That effort is the development of inservice training for persons who at the local educational agency level are responsible for programs of vocational education for handicapped and disadvantaged students. In Minnesota, this job is designated as Coordinator of Special Needs.

The Department of Educational Administration conducts inservice training for directors of special education. The present investigation was suggested by some of the developments in that program. Other activities have included a survey of special needs personnel in the various state divisions of vocational education and a survey of local special needs programs in the various states.

PURPOSE OF STUDY

The purpose of the present investigation was to delineate the nature of the job of Coordinator of Special Needs in Minnesota, and to determine what competencies are perceived by the incumbents to be required by that job.

The study investigated the following:

1. Characteristics of the organizational context of the job, nature of the program supervised, and background and professional orientation of the incumbents.

2. Competencies required on the job as perceived by the incumbents, and,

3. Whether, in their perceptions of their competency requirements, the Minnesota Coordinators of Special Needs constitute an indistinguishable single population or whether they are made up of distinguishable subpopulations.

Available information indicated that the job would be diverse and that the incumbents would be varied in background and orientation.

RELATED INFORMATION

Special Needs programming in vocational education (service to students who are handicapped and/or disadvantaged) has attained high visibility, and

its lead personnel are the subject of considerable interest. The job of Coordinator of Special Needs, to which is allocated the responsibility of special needs programs at the local level, has emerged as pivotal in the enterprise. The job is defined in general terms in the Minnesota State Plan for vocational education, but neither in Minnesota nor elsewhere was there found a statement of what competencies are required by the job.

The competencies of educational personnel have likewise become the subjects of extensive literature. The competency based movement is relatively recent, with most of its literature appearing in the 1970's. The competencies approach has become the most common one in the design of new training programs for educational personnel.

A state by state search has not revealed the existence of a preservice or inservice training program designed for Coordinators of Special Needs. Rate of entry into the job appears to be rapid and the incumbents appear to have been variously recruited. The specific facts regarding this, however, had not been previously ascertained.

DESIGN OF THE STUDY

Population The population studied consisted of all 33 present Coordinators of Special Needs in Minnesota.

Competency statements A jury of experts was assembled to generate competency statements. The jury consisted of: the state Coordinator of Vocational Special Needs Programs; the state Coordinator of Vocational Programs for the Handicapped; a University of Minnesota professor of vocational education; the president of the state association of special needs personnel, the secretary of the association, and another local special needs coordinator; a University of Minnesota professor of educational administration; the director of a private rehabilitation facility; and a consultant engaged in developing a statewide information system for special needs. The jury members individually submitted competency statements and then met for a full day and an additional half-day to refine and collate the statements. The result was a list of 44 competency statements.

Position description A questionnaire was developed for generating information about the organizational context, the program characteristics, and the coordinator preparation and orientation. This questionnaire was submitted to the 33 coordinators in Minnesota, with 100% return.

Competency rating The 44 competency statements were presented to the Coordinators with the request to check each competency as being either Not Needed, Useful, Important, or Essential to the conduct of the job. Returns were received from every coordinator.

Analysis The returns were statistically checked for patterns that might indicate reliability of the instruments. The characteristics as revealed on the position questionnaire and the ratings of the competencies were tabulated. Finally, 17 competencies were checked against 7 characteristics of the positions and of the incumbents to determine whether the competency ratings were those of a single population or of distinguishable subpopulations.

FINDINGS

Instrument reliability To the limited extent that verification was possible, the instruments appeared to be operating with reasonable reliability.

Organizational variables Geographic location was found to be roughly proportionate among central city, urban/rural, and rural. Most incumbents were found in Area Vocational-Technical Institutes operated by single school districts, and most were under the immediate direction of the school director. Most of the incumbents had job titles similar to that of coordinator and over two-thirds of the jobs had been established within the past two calendar years.

Program variables Most programs were neither completely integrated nor completely segregated. In size they ranged from ten to more than 300 students. Age levels served ranged from junior high to adults over age 21. Types of student need were reported equivocally. The coordinators reported supervising personnel ranging in number from zero (five programs) to over 20 (six programs).

Incumbent variables Most of the incumbents reported academic degrees of Masters level or beyond. Most of them had had at least 9 quarter credits of training in general education, vocational trade and industrial education, special education, and educational administration. Most had been employed in vocational education in the past. Most of them had taught in general education and over a third of them had taught in special education. Nearly two-thirds were members of the American Vocational Association and more than half were members of the National Association of Vocational Eduation Special Needs Personnel.

Competency ratings Most of the 44 competencies were rated by the Coordinators as being at least Important if not Essential. On the other hand, at least one coordinator reported each of 39 competencies to be not needed at all in his situation; only five competencies had no ratings of Not Needed. The most common rating of the competencies was Essential.

Contingencies A total of 17 competencies were selected to be matched against 7 variables from the position questionnaire. The proposition to be tested was that variables on the position questionnaire could be used to divide the responding population into groups who would rate the competencies differently. Of the 119 comparison, 4 were found to be statistically significant at the .05 level. This finding does not allow a practical division of the population into groups; for practical purposes, they may be considered as a single, but diverse, population.

CONCLUSIONS AND RECOMMENDATIONS

Reliability of information The information in general was considered to be adequately reliable for this early stage in the development of a training program.

Population unity Useful subpopulations among Minnesota Coordinators of Special Needs were not discriminated by this study. The population is best treated as unitary and the positions are best considered to be variants of the same job. Within that same job, there is much diversity and training approaches should be individualized.

Competency patterns Perceptions of competency needs lacked unanimity; however, the clear majority of coordinators considered most competencies on the list to be at least Important. The conclusion is that the expert jury was successful in generating competency statements that were reasonably compatible with the job of coordinator. Some of the ratings lead to the conclusion that some of the coordinators are not yet familiar with all of the requirements of their jobs.

The job The job of Coordinator of Special Needs is emergent and not yet fully defined. It consists of a new general class of personnel in vocational education, the first middle managers who are not trade-specific. The job has multidisciplinary affinities, with roots in at least vocational education, special education, and vocational rehabilitation, as was evident in the competency ratings and in the incumbents' backgrounds.

Recommendations to the field It is recommended that the state education agency and the incumbent coordinators engage in continued clarification of the nature of the coordinator job. The diversity of program and job context should not be unnecessarily discouraged. Neither should there be suppression of the diversity in incumbent background and orientation at this stage in the field's development.

Recommendations for training The general research and development plan of which this study was an early segment was confirmed in its immediate succeeding stages:

1. It is recommended that there be developed an individualized, modular, competency based inservice training program for Coordinators of Special Needs.

2. It is recommended that investigation be made of the applicability of this study's findings and recommendations to other states.

3. Since the position is in many respects analogous to that of the director of special education, consideration should be given to using the already developed training program for special education directors where applicable.

4. It is recommended that a determination be made of actual competency requirements of the job as well as the presently reported incumbent perceptions of competency need.

5. Finally, the competency list used in this study is affirmed to be an appropriate one and is recommended for further refinement, such as the division into administrative and service competencies and a free sort to develop a taxonomy of competencies.

Richard Weatherman,
Project Director

Gordon Krantz,
Project Coordinator

4/12/76

APPENDIX B

UNIVERSITY OF MINNESOTA
TWIN CITIES

Department of Educational Administration
225 Health Services Building
St. Paul, Minnesota 55108

MEMORANDUM

TO: Richard Weatherman, Project Director

FROM: Gordon Krantz, Project Coordinator

DATE: April 14, 1976 (revised July 21, 1976)

SUBJECT: Taxonomy of Special Needs

We have discussed this from time to time over the past year and I would like to put it down on paper for more serious analysis. At this point, we do not have funding to carry out the project proposed here, but perhaps time will change on that.

The essential proposal is to develop a functional taxonomy of special needs in vocational education.

One of the striking facts that repeatedly presents itself as we look at the special needs services is that the field is hampered for lack of a good conceptual framework. This lack has been evident from the very beginning and is partly inherited from other fields. For example, vocational education picked up pretty much uncritically the definition of handicap that had been used in special education, a definition that fails to distinguish between the disability and its educational effects.

Another illustration goes back to a phone call I received from the Minnesota Division of Vocational Education within a few days after the passage of the 1968 Amendments. I was asked how many students in vocational education should be expected to display special needs. When the inquiry elicited the proposition that the Division might be interested in functional problem more than in labels, I immediately went over for a conference. We maintained contact with that for several months, during which time personnel of Minnesota attempted with near success to get the federal guidelines to concentrate upon functional need.

Another historical fact is that finding in our survey of state special needs coordinators that they felt a need for more clear guidelines in this matter.

Perhaps most salient is the report by the Olympus Corporation (and similar reports) that special needs programming in vocational education is open to challenge because of its very poor record of students served, kind of need, and services provided. Again, the essential problem as I see it is the lack of a useful conceptual framework.

All of those evidences and many others lead to the conclusion that the field needs to have a functional definition of special needs. The needs are apparently visible to the people in the field and there is a great deal of concern about them, but there are very poor guidelines and ideational frameworks to turn the concern into effective action.

Those are some of the reasons behind this proposition.

In order to derive a useful functional taxonomy of special needs, I would propose that the identification of need and the categorization of need be carried out de novo. There is no good reason why special needs in vocational education should be stuck with the infelicities of existing definitions and classifications. Further, it appears reasonable that vocational education has its own mission and circumstances, so that it would be hampered in that mission if it uncritically adopted someone else's idea of need in other circumstances.

The steps that should be carried out are outlined below. For convenient reference, these steps are also outlined in an attached project chart.

Develop taxonomy of special needs in vocational education. Determine, in terms that are compatible with the mission and clientele of vocational education, the functional nature of handicap and disadvantage as it is experienced in the field; categorize the needs in terms that are compatible with the ideation of those who are responsible for the design and conduct of services. The essential methods are to generate statements of need instances as seen in the field and to subject the instances to a free-sort.

Select observers. Identify a minimum of 1000 respondents located in each of the states. They should represent in reasonable proportions those who work only directly with students, those who carry local program responsibility, and those who carry regulatory responsibility.

Design incident instrument. Two major alternatives are available here: the Flannagan Critical Incident Technique and the Last-Case Technique. The letter consists of asking the respondent to report on the last individual with whose special needs he dealt. The instrument should allow as much freedom as possible for the respondent to structure his response upon the functional characteristics of the reported individual and circumstances.

Solicit responses. By mail and with suitable instructions, the instrument should be administered to the selected respondents. Suitable follow-up and other mechanics should be arranged.

Analyze and select. The responses should be collated, with minimum editing or no editing. Selection should consist of eliminating those responses that do not meet the definition of an individual instance of special need in vocational education.

Administer free sort. The technique of choice is latent partition analysis. The same respondents as generated the incidents should be asked to sort up to 100 randomly assigned incidents into categories to be determined by the respondents. This can be conducted by mail.

Analysis, tentative report. The classification of need incidence as derived by LPA should be merged across respondent samples into a single taxonomy. This taxonomy should then be brought into a tentative report with illustrations of each category and sub-category.

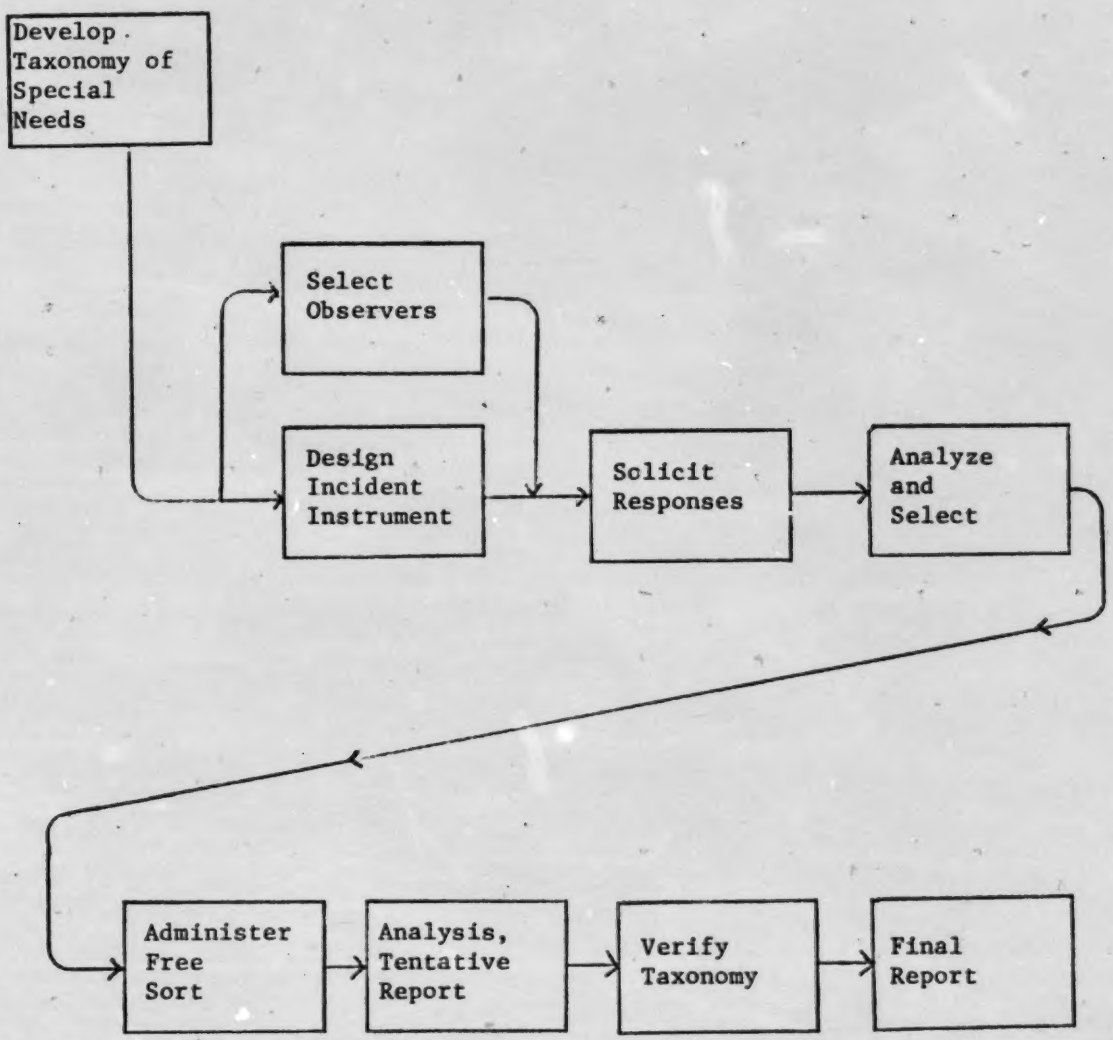
Verify taxonomy. A jury of perhaps ten persons, each representative of some discipline, level or regional identity, should be used to verify the acceptability of the taxonomy. This jury should be first given opportunity to study and react to the proposed taxonomy on an unassembled basis and then given opportunity to assemble for a minimum of two days in order to pass upon the the cridibility and utility of the taxonomy.

Final report. Based upon the derived taxonomy and the opinions of the expert jury, the taxonomy would be brought into final report and presented to the field of special needs programming in vocational education. It should be useful for the design of programs, for the allocation of resources, for staffing, and for accountability reports.

Estimating the cost of this proposal would require more detailing than has been given here. However, it appears that it should be possible to carry out this project in approximately a year's time.

so

Attachment


Develop Taxonomy of Special Needs
Select Observers
Design Incident Instrument
Solicit Responses
Analyze and Select
Administer Free Sort
Analysis, Tentative Report
Verify Taxonomy
Final Report